

2015-1066

**In the
United States Court of Appeals
for the Federal Circuit**

COMMONWEALTH SCIENTIFIC AND INDUSTRIAL
RESEARCH ORGANISATION

Plaintiff-Appellee,

v.

CISCO SYSTEMS, INC.,

Defendant-Appellant.

Appeal from the United States District Court for the Eastern District of Texas in
case no. 6:11-cv-00343, Judge Leonard Davis.

**BRIEF OF *AMICUS CURIAE* ERICSSON INC.
IN SUPPORT OF PLAINTIFF-APPELLEE**

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April 13, 2015

CERTIFICATE OF INTEREST

Counsel for Amicus Curiae Ericsson Inc. certifies the following:

1. The full name of every party or amicus represented by me is:

Ericsson Inc.

2. The name of the real party in interest (if the party named in the caption is not the real party in interest) represented by me is:

N/A.

3. All parent corporations and any publicly held companies that own 10 percent or more of the stock of the party or *amicus curiae* represented by me are:

Ericsson Inc. is wholly-owned by Ericsson Holding II Inc., which in turn is wholly-owned by Telefonaktiebolaget LM Ericsson. Telefonaktiebolaget LM Ericsson is publicly held and trades in the United States through American Depository Receipts under the name LM Ericsson Telephone Company.

4. The names of all law firms and the partners or associates that are expected to appear in this court for the *amicus curiae* represented by me are:

McKOOL SMITH P.C.: Mike McKool, Jr.; Theodore Stevenson III; John B. Campbell; Joel L. Thollander.

Date: April 13, 2015

/s/ Joel L. Thollander

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CORPORATE DISCLOSURE STATEMENT

Ericsson Inc. is wholly-owned by Ericsson Holding II Inc., which in turn is wholly-owned by Telefonaktiebolaget LM Ericsson. Telefonaktiebolaget LM Ericsson is publicly held and trades in the United States through American Depositary Receipts under the name LM Ericsson Telephone Company.

STATEMENT REGARDING AUTHORSHIP AND FUNDING

No party or party's counsel authored this brief in whole or in part. No party, party's counsel, or other person (aside from *amicus curiae* Ericsson Inc.) contributed money intended to fund the preparation or submission of this brief.

I. INTEREST OF *AMICUS CURIAE*

Ericsson is a leading supplier of wireless network equipment, a leading developer of wireless technologies, and both a licensor and licensee of many substantial patents in the telecommunications industry. With more than 100,000 employees globally, Ericsson is a pioneer of the modern cellular network. Over 1,000 networks in more than 180 countries use Ericsson equipment, and a significant portion of the world's mobile traffic passes through these networks. Ericsson employs more than 10,000 people in the United States and supplies network equipment and/or services to every major U.S. telecommunications operator from offices in California, Colorado, Georgia, Illinois, Kansas, New Jersey, New York, Texas, and Washington, among others.

Looking to the future, Ericsson sees an ever more connected world—a networked society with over fifty billion connected devices, all of which will require more efficient connectivity with greater capacity and new functionality. To meet that need, Ericsson currently devotes more than 20,000 employees and approximately five billion dollars a year, almost 15% of its net sales, to research and development. Ericsson's innovations have been rewarded with 37,000 issued patents worldwide. Many of these are standard-essential patents that Ericsson voluntarily commits to license on FRAND terms. Many of Ericsson's patents also cover particular features found in multi-feature wireless devices and products.

Ericsson has successfully licensed this patent portfolio, with more than 100 patent license agreements involving significant and standard-essential patents. The royalties associated with these licensing efforts assist Ericsson's continued contribution to the development of tomorrow's telecommunications technologies.

Ericsson is not only a licensor of patents; it is also a licensee to numerous patents held by others—patents that also typically cover particular features found in multi-feature wireless devices and products.

As both a licensor and licensee of patents in the telecommunications industry, Ericsson has substantial interest in the development of fair and balanced rules governing the enforcement of patents in this field. Ericsson files this amicus brief to address important issues raised in this appeal regarding the purposes and application of the “entire market value rule” and the proposal that royalties on patented features of multi-feature wireless devices should be limited to some percentage of the price of the chips incorporated into those devices.

All parties have consented to Ericsson's filing of this brief as *amicus curiae*.

II. INTRODUCTION AND ARGUMENT SUMMARY

Cisco and its amici assume that this Court's apportionment precedents lead to a bright-line rule that damages must be based on the price or profits of the Wi-Fi chips incorporated into the end products accused of infringement in this case. Cisco.Br.37-52; Apple.Br.6-17; Intel.Br.5-18. But that assumption is incorrect, and this proposed chip-based approach in fact represents a radical and unwarranted extension of the so-called "entire market value rule" (or EMVR)—one that is ultimately in direct conflict with the law and purposes of apportionment. Ericsson files this amicus brief to highlight the ways in which this chip-based proposal is misguided both as a matter of policy and as a matter of law. Furthermore, Ericsson would point out that, as both a legal and a factual matter, the district court did not violate any rule of apportionment in the underlying damages bench trial.

(1) (a) The chip-focused approach advocated by Cisco and its amici fails as a matter of policy for at least three reasons.

First, and critically, it unwisely threatens the continued viability of the standard-setting process. All concerned agree that open standards are important and beneficial, and the standard-setting regime is premised on the condition that royalties for standard-essential patents will "be high enough to ensure that innovators have appropriate incentive to invest in future developments and contribute their inventions to the standard-setting process." *Ericsson, Inc. v. D-*

Link Sys., 773 F.3d 1201, 1229 (Fed. Cir. 2014). The Intel amici paint a frank portrait of what the world might look like if their proposal is adopted: each patent essential to the 802.11 standards at issue could be capped at a value between \$0.0001 and \$0.0008 per chip. Intel.Br.28-29. Aside from the obvious legal problems associated with such an artificial limitation on damages—which breaks the essential link between the invention and the *actual value added to the end product*—these numbers indicate that, if every man, woman, and child in the United States bought a device making use of the technology (that is, well over 300 million devices), the holder of a standard-essential patent could expect to receive a total royalty between \$37,000 and \$250,000. Innovators could expect, that is, that they would never have any realistic chance of recouping their substantial investment in developing inventions contributed to the standard-setting process.

Second, the proposed chip-based approach fails to account for the chip-related market realities identified in the district court’s damages analysis—in particular “the depression of chip prices in the damages period resulting from rampant infringement in the wireless industry.” A23. It makes no sense to base damages on some percentage of the sales prices of Wi-Fi chips when those prices do not reflect the value of the intellectual property that the chips implement. A23. In these circumstances, as the court found, the sales price of a chip “provides no indication of [the invention’s] actual value.” A23.

Third, requiring focus on the price or profits of incorporated chips would permit the “skewed horizon” that the EMVR was designed to prevent. The EMVR and its associated “smallest saleable unit” considerations are judge-made requirements springing from the observation that exceedingly large market-value figures might “skew unfairly the jury’s ability to apportion the damages”—so courts “must insist on a more realistic starting point for the royalty calculations by juries.” *Ericsson*, 773 F.3d at 1227. But an *unrealistically low* starting point is just as likely to “skew” the jury’s damages horizon as an *unrealistically high* starting point. Indeed, exceedingly small numbers—such as, for example, the \$0.0001 per-chip valuation suggested by the Intel amici—can be just as misleading, disproportionate, and prejudicial as exceedingly large numbers. The focus must be on “the incremental value that the patented invention adds to the end product,” *id.* at 1226, not the artificially deflated price of incorporated chips.

(1) (b) The chip-focused approach advocated by Cisco and its amici also fails as a matter of law for at least three reasons. That is, the suggestion that the EMVR creates a bright-line rule that required the district court to base damages on some percentage of the price or profits of the purported “smallest saleable unit” at issue—Wi-Fi chips—contravenes at least three separate lines of legal authority.

First, this proposed chip-based approach improperly transforms an “evidentiary principle” protecting “less equipped” juries into a bright-line legal

rule binding fully equipped jurists. In addition to the fact that Cisco and its amici would draw their bright lines along the wrong boundaries, the Supreme Court has warned that, “when a court transforms [a] general principle into a rigid rule ... , it errs.” *KSR Int’l Co. v. Teleflex Inc.*, 550 U.S. 398, 419 (2007).

Second, the proposed chip-based approach improperly precludes the factfinder from determining the value that the patented invention actually adds to the accused end product. Under the singular focus on the price of chips demanded by Cisco and its amici, the value that an invention adds to the end product *would be entirely irrelevant*: it would be legal error, in fact, to recognize that a particular technology implemented in a Wi-Fi chip could add negligible value to one end product, but substantial value to another. That is in direct conflict with the essential requirement of apportionment. *Ericsson*, 773 F.3d at 1226-27.

Third, the proposed chip-based approach improperly allows an infringer to limit the available damages. It is well settled that a reasonable royalty may not be “capped by the sales price of the ... product” implementing an invention. *Powell v. Home Depot U.S.A., Inc.*, 663 F.3d 1221, 1239 (Fed. Cir. 2011). While Cisco and its amici argue vigorously that the district court should have limited the royalty rate based on the sales price or profit margins of the Wi-Fi chips at issue, this Court has recently confirmed that limiting a royalty on that basis is *clear error*. *Douglas Dynamics, LLC v. Buyers Prods. Co.*, 717 F.3d 1336, 1346 (Fed. Cir. 2013).

The chip-based approach advocated by Cisco and its amici is thus flawed on both legal and policy grounds: it is deeply inconsistent with the law of apportionment, and it threatens to undermine the incentives necessary to ensure that innovating companies continue to contribute their best technology to the open standards that increase consumer choice, improve interoperability, and reduce costs. *Ericsson*, 773 F.3d at 1208. In deciding this appeal, the Court should thus reject the myopic focus on chip price advocated by Cisco and its amici, and reconfirm that the critical apportionment question turns on the incremental value that the patented invention adds to the accused end product. *Id.* at 1226.

Furthermore, as both a legal and a factual matter, the district court did not violate any rule of apportionment in the underlying damages bench trial.

(2) (a) With respect to the law, Cisco and its amici err in assuming that the EMVR, with its “smallest saleable unit” considerations, was relevant here at all: those rules are *not applicable to bench trials*. The EMVR does not flow from any necessary requirement of apportionment; it reflects an “evidentiary principle” relevant to “royalty calculations by juries.” *Ericsson*, 773 F.3d at 1226. It ensures that, “where a multi-component product is at issue and the patented feature is not the item which imbues the combination of the other features with value, care [is] taken to avoid misleading the jury by placing undue emphasis on the entire product.” *Id.* at 1226-27. An evidentiary principle designed to protect “less

equipped” jurors from being misled by the discussion of outsized market valuations plainly does not tie the hands of an experienced jurist overseeing a damages bench trial such as the one in this case. *Id.*; A2; *cf.* FED. R. EVID. 403 (excluding otherwise relevant evidence if the evidence may mislead the jury).

(2) (b) With respect to the facts, Cisco and its amici err in suggesting that the district court based damages on the entire market value of the accused end products. Whatever that market value may be—it is mentioned nowhere in the court’s findings of facts and conclusions of law—it played no role in the court’s damages analysis. A1-32. The district court simply awarded a per-product royalty linked with sales *volume*, not sales *price*. A31. And it based this award on evidence that the parties would have agreed to negotiate this very form of a per-product royalty within the very numerical ranges used by the court. A23-32. The record indicated that Cisco had raised “the possibility of Cisco paying CSIRO \$0.90 in royalties per Cisco enterprise product,” while CSIRO placed the incremental value of its invention closer to \$1.90 per end product. A26. The district court found that this was “the best evidence available” showing how the parties themselves “valued the contribution of the ’069 Patent near the relevant time period.” A26. This analysis was entirely consistent with the “essential requirement” of apportionment, which provides that the “award must be based on the incremental value that the patented invention adds to the end product.” *Ericsson*, 773 F.3d at 1226.

III. ARGUMENT

A. There is no bright-line rule—and should be no rule—limiting damages to some percentage of the price of incorporated chips.

Cisco and its amici appear to assume that this Court's apportionment precedents lead to a bright-line rule that damages must be based on the price or profits of the Wi-Fi chips incorporated into the end products accused in this case. Cisco.Br.37-52; Apple.Br.6-17; Intel.Br.5-18. That assumption is incorrect, and any such proposal should be rejected. As a *policy* matter, this chip-focused approach would unwisely: (a) threaten to disrupt the balance necessary to ensure that companies such as Ericsson (and other amici in this case) continue to participate in and contribute their technology to the important and beneficial standard-setting process; (b) ignore market realities identified by the district court; and (c) engender the very confusion that the EMVR was designed to prevent. And as a *legal* matter, this chip-focused approach would improperly: (a) transform an evidentiary principle into a bright-line legal rule; (b) preclude the fact-finder from determining the value that the invention adds to the accused end product; and (c) allow an infringer to arbitrarily limit the available damages.

1. A chip-based approach fails as a matter of policy.

a) The proposed approach threatens the continued viability of the standard-setting process.

All concerned agree that open telecommunications standards are important and beneficial: they have reduced barriers to entry, increased consumer choice,

improved technological performance and interoperability, and reduced costs. *Microsoft Corp. v. Motorola, Inc.*, 696 F.3d 872, 876 (9th Cir. 2012). Innovating members of standard-setting organizations (SSOs) invest significant time and resources conceptualizing, modeling, and testing the solutions that they offer to the standard. This process results in a state-of-the-art systems specification, with the best technical solutions incorporated into the standard. SSOs typically require that innovators contributing their proprietary technology to the standard make a commitment to license their patents covering incorporated technology—standard-essential patents—to any interested implementer on a fair, reasonable, and non-discriminatory (FRAND) basis. *Ericsson*, 773 F.3d at 1208-09.

This FRAND licensing regime balances two primary goals: (1) providing implementers with access to standardized technology at reasonable cost; while (2) providing innovators with sufficient incentive to continue contributing their proprietary technology to this pro-competitive process. The “importance of [this] balance is especially pronounced where there is a critical need for seamless interoperability among software, components and other technologies embedded in microelectronic devices, such as cellular telephones.” National Research Council, *Patent Challenges for Standard-Setting in the Global Economy* at 17 (2013); see also *Ericsson*, 773 F.3d at 1229 (citing observation that royalty rates “must be high

enough to ensure that innovators have appropriate incentive to invest in future developments and contribute their inventions to the standard-setting process”).

Both the Apple and Intel amici discuss purported “real-world dynamics” and “real-world problems” that, these amici argue, could upset the FRAND-regime balance if damages in cases such as this one are not based on some percentage of the price or profits of the chips that may implement standardized technology. Apple.Br.1, 19-24; Intel.Br.27-29. Ericsson respectfully suggests that, in the real world, the chip-based approach advocated by Cisco and its amici poses the more serious threat to the standard-setting process and the balance between implementers and innovators that the FRAND regime navigates.

Apple initially suggests that a chip-focused approach is necessary due to the “grave risks” and “serious concerns” posed by “hold up” and “royalty stacking.” Apple.Br.19-24. “Hold up” describes the situation in which an SSO

complete[s] its lengthy process of evaluating technologies and adopting a new standard, only to discover that certain technologies essential to implementing the standard are patented. When this occurs, the patent holder is in a position to ‘hold up’ industry participants from implementing the standard. Industry participants who have invested significant resources developing products and technologies that conform to the standard will find it prohibitively expensive to abandon their investment and switch to another standard.

Broadcom Corp. v. Qualcomm Inc., 501 F.3d 297, 310 (3d Cir. 2007); *Ericsson*, 773 F.3d at 1209. “Royalty stacking” describes the concern that, if a standard

implicate[s] hundreds, if not thousands of patents, ... the cumulative royalty payments to all standard-essential patent holders can quickly become excessive and discourage adoption of the standard.

In re Innovatio IP Ventures, LLC, No. 11-CV-9308, 2013 U.S. Dist. LEXIS 144061, at *66 (N.D. Ill. Sept. 27, 2013); *Ericsson*, 773 F.3d at 1209. While much has been written about hold-up and royalty stacking in the standard-setting context, Ericsson submits that these are not “real-world problems”—they are hypothetical concerns that, in the real world, the FRAND regime has successfully addressed.

Here, as elsewhere, “a page of history is worth a volume of logic,” *Eldred v. Ashcroft*, 537 U.S. 186, 200 (2003), and well over a decade’s worth of experience with the IEEE’s 802.11 standards has revealed no evidence that any industry participant has been held up from implementing these standards, or that excessive royalty payments have discouraged their adoption. Most certainly the “grave risks” of hold-up have not prevented Apple from producing 802.11-compliant devices, nor have the “serious concerns” of stacking prevented Apple from making a commercially viable profit on those standard-compliant devices. This Court has recently held that these hypothetical concerns should play no role in a damages analysis “unless the accused infringer presents actual evidence of hold-up or stacking.” *Ericsson*, 773 F.3d at 1234. In this case, as in that one, “something more than a general argument that these phenomena are possibilities is necessary.” *Id.* And once again, there is no actual evidence of hold-up or stacking with respect to

these industry standards. *Id.* (“Defendants failed to present any evidence of *actual* hold-up or royalty stacking.”); *see also, e.g.*, Keith Mallinson, <http://ipfinance.blogspot.com/2014/09/stacking-deck-in-analysis-of-smartphone.html> (“Estimates of patent licensing costs for smartphone manufacturers are greatly exaggerated.”).¹

The Intel amici paint a more complete picture of what the world might look like if their hypothetical hold-up and stacking concerns led to the adoption of their proposed chip-focused approach. They point out, for example, that in order to alleviate their royalty-stacking concerns, each patent essential to the 802.11 standards could be capped at a value between \$0.0001167 and \$0.00078333 per chip. Intel.Br.28-29. Pursuant to this math, if every man, woman, and child in the United States bought an 802.11-compliant device making use of a patented technology, an essential-patent holder could expect to receive a total royalty somewhere between \$37,000 and \$250,000—regardless of the incremental value that the particular standard-essential patent added to the use of those devices.

¹ While Apple discusses the purported “grave risks” of “hold up,” Apple.Br.20, it fails to identify the countervailing threat posed by “hold out”—where “an unwilling licensee of an SEP seek[s] to avoid a license based on the value that the technological advance contributed to the prior art.” *Apple Inc. v. Motorola, Inc.*, 757 F.3d 1286, 1333 (Fed. Cir. 2014) (Rader, C.J., dissenting in part). As then-Chief Judge Rader noted in a recent appeal involving Apple, “a ‘hold out’ ... is equally as likely and disruptive as a ‘hold up,’” and the “record in this case shows evidence that Apple may have been a hold out.” *Apple*, 757 F.3d at 1333.

In this world proposed by the Intel amici, an innovating SSO member could anticipate that, *if* its most cutting-edge technology were adopted into an industry standard, and *if* that industry standard proved highly effective and wildly successful—the best of all possible worlds—even *then* the innovator would be unlikely to recoup its investment in the invention contributed to the standard-setting process. The balance negotiated by the FRAND regime requires royalty rates that are “high enough to ensure that innovators have appropriate incentive to invest in future developments and contribute their inventions to the standard-setting process.” *Ericsson*, 773 F.3d at 1229. The chip-based approach advocated by Cisco and its amici appears to fail this test, and thus threatens the continued viability of open telecommunications standards.

b) The proposed approach ignores the market realities identified by the district court.

The approach advocated by Cisco and its amici further ignores the chip-related market realities identified by the district court in its damages analysis—in particular “the depression of chip prices in the damages period resulting from rampant infringement in the wireless industry.” A23. As the court explained:

It is simply illogical to attempt to value the contributions of the '069 Patent based on wireless chip prices that were artificially deflated because of pervasive infringement. Basing a royalty solely on chip price is like valuing a copyrighted book only on the costs of the binding, paper, and ink needed to actually produce the physical product. While such a calculation captures the cost of the physical product, it provides no indication of its actual value.

A23. Cisco and its amici have no persuasive response to this insightful analogy.

Cisco offers a superficial factual challenge, asserting that CSIRO “never even established rampant infringement by Cisco.” Cisco.Br.44. But of course Cisco *never contested* its own rampant infringement, and *stipulated* to liability for every accused product practicing one of seven different versions of the IEEE’s 802.11 standards for wireless communications. A3. That challenge fails.

The Intel amici suggest that the court’s copyrighted-book analogy is “false” because a copyright covers the “*expression*” of an idea, while a utility patent covers the “*utility* of an idea as implemented in a device, system, or process.” Intel.Br.10. This observation only reinforces the district court’s analysis: as the court noted, the *utility* of the ’069 Patent is not found in the “small amount of silicon” in the Wi-Fi chip; it is found in implementations that solve “the multipath problem for indoor wireless data communication.” A23. The *utility* of the patent-in-suit is found, that is, when a coffee-shop visitor is “able to access the Internet when she connects [her laptop] to the coffee shop’s wireless network.” *Ericsson*, 773 F.3d at 1208. That is the *real-world utility* that reveals, reflects, and informs the incremental value added to the relevant end products.

Cisco and its amici also suggest that “[t]he price of both a Wi-Fi chip and a book reflect both the physical cost of manufacturing and the intangible value of the ideas those physical products embody.” Cisco.Br.43; Apple.Br.13; Intel.Br.11. But

that is not necessarily true, and it simply begs the question whether the price of the chip or book at issue accurately reflects “its actual value.” A23. No one would think that “actual value” was reflected in the price paid for a bootlegged DVD, or an illegally downloaded e-book, or a Wi-Fi chip bought off the back of a truck following a “five finger discount.” In each of those cases, prices are depressed because the items involve stolen property. While those are dramatic examples, the principle is largely the same in this context: if the chip being sold embodies significant intellectual property that has not been licensed, then there is good reason to believe that the sales price of that chip does not reflect its actual value.

The district court reasonably found that this was in fact the case, and those market realities counsel against the adoption of any approach that would artificially limit damages to some percentage of the price of incorporated chips.² A23.

c) The proposed approach permits the “skewed horizon” that the EMVR was designed to prevent.

As this Court has recently made clear—and Cisco’s amici agree—the “essential requirement” animating damages apportionment “is that the ultimate

² The Aruba amici offer an argument regarding proof of “price erosion,” but the relevant issue was not whether price erosion had been demonstrated; it was whether damages should be based on particular sales prices that were plainly unreliable and “provide[d] no indication of [the invention’s] actual value.” A23. The Intel amici also suggest that “both chip prices and end-product prices would be ‘depressed’ under the court’s logic.” Intel.Br.17. But of course the district court did not base its damages analysis on “end-product prices”—it based its analysis on testimonial evidence reflecting Cisco’s own measure of the incremental value provided by the patent-in-suit to Cisco’s end products. A26.

reasonable royalty award must be based on the incremental value that the patented invention adds to the *end product*.” *Ericsson*, 773 F.3d at 1226 (emphasis added); Apple.Br.5. Critically, the EMVR and its associated “smallest saleable unit” are not linked in any necessary way with this essential legal requirement; they flow instead from an “evidentiary principle” that the Court’s “cases have added to that governing legal rule.” *Id.* These judge-made evidentiary requirements spring from the observation that introducing exceedingly large market-value figures might “skew unfairly the jury’s ability to apportion the damages”—so courts “must insist on a more realistic starting point for the royalty calculations by juries.” *Id.* at 1227; *see also LaserDynamics, Inc. v. Quanta Computer, Inc.*, 694 F.3d 51, 67-68 (Fed. Cir. 2012) (noting that these evidentiary principles require exclusion of evidence that “cannot help but skew the damages horizon for the jury”); *Uniloc USA, Inc. v. Microsoft Corp.*, 632 F.3d 1292, 1320 (Fed. Cir. 2011) (same).

While the EMVR and the related “smallest saleable unit” doctrine thus provide protection against skewing a jury’s damages horizon based on *exceedingly large* market-value figures, the chip-limited approach advocated by Cisco and its amici would threaten to skew a jury’s damages horizon based on *exceedingly small* market-value figures. Again, this is vividly demonstrated by the Intel amici’s suggestion that the standard-essential patent at issue in this case should have been capped at a value around \$0.0008 per chip. Intel.Br.28-29. Record evidence

indicated that Cisco executives valued the incremental contribution of the patent-in-suit at somewhere around \$0.90 per end product—more than one thousand times greater than the valuations suggested by Cisco’s amici. A26. Exceedingly small numbers can be just as misleading, disproportionate, and prejudicial as exceedingly large numbers. This chip-focused approach proposed by Cisco and its amici should thus be rejected to protect against the very jury confusion that the EMVR and its “smallest saleable unit” were designed to prevent. The focus must be on “the incremental value that the patented invention adds to the end product,” *Ericsson*, 773 F.3d at 1226, not the artificially deflated price of incorporated chips.

2. A chip-based approach fails as a matter of law.

a) The proposed approach improperly converts an evidentiary principle into bright-line legal rule.

While the “desire for bright line rules” is natural, this Court has rejected such rules in favor of careful consideration of “the facts of record” in this very damages context. *Ericsson*, 773 F.3d at 1232. The Supreme Court has likewise repeatedly rejected bright-line rules in other patent-related contexts. *See KSR Int’l Co. v. Teleflex Inc.*, 550 U.S. 398, 419 (2007) (“when a court transforms the general principle into a rigid rule ... it errs”); *eBay Inc. v. MercExchange, L.L.C.*, 547 U.S. 388, 392-93 (2006) (“this Court has consistently rejected invitations to replace traditional equitable considerations with [an automatic] rule”).

As noted, the EMVR is “an important evidentiary principle” pursuant to which the “smallest saleable unit” may provide “a more realistic starting point for the royalty calculations by juries.” *Ericsson*, 773 F.3d at 1226-27. But the approach proposed by Cisco and its amici—to the effect that, *e.g.*, **“There Is No Justification For Establishing a Royalty Base That Encompasses More Than The Smallest Saleable Unit,”** Cisco.Br.40—would improperly transform this evidentiary principle into a bright-line legal rule. Such transformation of a “general principle into a rigid rule” is error. *KSR*, 550 U.S. at 419. Furthermore, Cisco and its amici assume that their unbending “smallest saleable unit” approach to damages should apply not only to jury trials, but to bench trials as well. Cisco.Br.40; Apple.Br.13-14; Intel.Br.8-9. They would thus have this Court convert an evidentiary principle designed to protect “less equipped” jurors from placing “undue emphasis” on outsized market valuations into a bright-line rule tying the hands of experienced jurists. The proposed chip-based approach thus compounds error by transforming a general principal into a rigid rule with bright lines drawn in the wrong place. *Ericsson*, 773 F.3d at 1226-27, 1232.

b) **The proposed approach improperly undermines the essential requirement of apportionment.**

Indeed, the approach advocated by Cisco and its amici would not only transform an evidentiary principle into a bright-line legal rule; it would undermine the essential requirement of apportionment—thus turning the very purposes of the

EMVR and “smallest saleable unit” on their heads. Apportionment requires a determination of “the incremental value that the patented invention adds to the *end product*.” *Id.* at 1226 (emphasis added). The EMVR and “smallest saleable unit” are designed to ensure that outsized valuations do not “skew unfairly the jury’s ability” to determine the incremental value added to the end product. *Id.* at 1227. But under the chip-limited approach advocated by Cisco and its amici, the value added to the end product *would be entirely irrelevant*: it would be legal error, in fact, to recognize that a particular technology implemented in a Wi-Fi chip could add negligible value to one end product, but substantial value to another. That is in conflict with the fundamental principles of apportionment. *Id.* at 1226-27.

In this case, there was direct, real-world evidence that Cisco believed the patent-in-suit added somewhere around \$0.90 to the value of each of its end products. A26. CSIRO, on the other hand, placed that value closer to \$1.90. A26. Given the particular products at issue—which are principally directed to enabling wireless communication, A11—as well as the district court’s finding that the patent-in-suit “largely solved the multipath problem for indoor wireless communication,” A23, there is nothing shocking or unseemly about these numbers. *See Ericsson*, 773 F.3d at 1208 (discussing use of indoor wireless networks).

In any event, the point is that the most relevant and reliable evidence available to the district court indicated that Cisco and CSIRO valued the

contribution of the patented technology at somewhere in the range of \$0.90 to \$1.90 per end product. Now Cisco and its amici invite this Court to adopt a bright-line rule that would preclude consideration of this relevant, real-world evidence of the incremental value added to the accused end products in favor of a singular and myopic focus on the price of Wi-Fi chips incorporated into the accused end products. The Court should decline that invitation. An infringer that recoups substantial value from the incorporation of a Wi-Fi chip into its end products should not necessarily be subject to the same royalty as an infringer that recoups little to no value from the same chip added to its end products. And the legal question must ultimately turn on the incremental value added to the end products, not the price of chips in those products. *Ericsson*, 773 F.3d at 1226-27.

c) The proposed approach improperly allows an infringer to limit the available damages.

The bright-line approach proposed by Cisco and its amici would further conflict with an established line of cases repeatedly rejecting the proposition that a reasonable royalty may be “capped by the sales price of the ... product” implementing the inventive aspect of an asserted patent. *Powell v. Home Depot U.S.A., Inc.*, 663 F.3d 1221, 1239 (Fed. Cir. 2011); *Stickle v. Heublein, Inc.*, 716 F.2d 1550, 1563 (Fed. Cir. 1983); *Rite-Hite Corp. v. Kelley Co.*, 56 F.3d 1538, 1555 (Fed. Cir. 1995) (en banc). Indeed, this Court has broadly rejected caps on reasonable royalties in various contexts. *Mars v. Coin Acceptors, Inc.*, 527 F.3d

1359, 1373 (Fed. Cir. 2008) (“it is wrong as a matter of law to claim that reasonable royalty damages are capped at the cost of implementing the cheapest available, acceptable, non-infringing alternative”); *Monsanto Co. v. Ralph*, 382 F.3d 1374, 1383 (Fed. Cir. 2004). A reasonable royalty “is based not on the infringer’s profit margin” or product sales price, “but on what a willing licensor and licensee would bargain for at hypothetical negotiations on the date the infringement started.” *State Indus., Inc. v. Mor-Flo Indus., Inc.*, 883 F.2d 1573, 1580 (Fed. Cir. 1989). That was properly the district court’s focus. A23-32.

While Cisco and its amici argue vigorously that the district court should have limited the royalty rate based on the sales price or profit margins of the Wi-Fi chips implementing the inventive aspect of the patented technology, this Court has recently determined that limiting a royalty on that basis is *clear* error. *Douglas Dynamics, LLC v. Buyers Prods. Co.*, 717 F.3d 1336, 1346 (Fed. Cir. 2013) (“the district court clearly erred by limited the ongoing royalty rate based on [the infringer’s] profit margins”). Cisco’s chip-based approach “establishes nothing more than what it might have preferred to pay, which is not the test for damages.” *Golight, Inc. v. Wal-Mart Stores, Inc.*, 355 F.3d 1327, 1338 (Fed. Cir. 2004); *Rite-Hite*, 56 F.3d at 1555 (“what an infringer would prefer to pay is not the test for damages”). Fundamentally, the rule advocated by Cisco and its amici would allow

an infringer to limit the available damages through manipulation of the price or profit margin of the infringing product.³ That is plainly improper.

B. The district court did not violate any apportionment rule.

While Ericsson files this amicus brief principally to highlight the critical problems posed by the chip-focused approach advocated by Cisco and its amici in this appeal, it should further be noted that—as both a legal and a factual matter—the district court did not violate any rule of apportionment in this case.

1. The EMVR—an evidentiary principle protecting “less equipped” jurors—had no place in this bench trial.

Cisco and its amici err at the start in assuming that the EMVR was applicable at all to this damages trial before the district court. Cisco.Br.37-52; Apple.Br.6-17; Intel.Br.5-18. No rule, evidentiary or otherwise, precludes courts from considering market valuations when determining damages.

Indeed, a statutorily proper royalty award can “be fashioned by starting with the entire market value of a multi-component product—by, for instance, dramatically reducing the royalty rate to be applied in those cases.” *Ericsson*, 773 F.3d at 1227. Apportionment can, in fact, be accomplished “in various ways,” and

³ There appears to be some dispute as to whether the chips, standing alone, infringe the patent-in-suit. A20. Because the issue regarding implementation in chips is likely to recur frequently, the Court should make clear that—even where there is no dispute that a chip will infringe standing alone—the critical legal question must turn on the incremental value added to the end product, not the price or profit margin associated with the chip.

the “governing legal rule” will be satisfied so long as the royalty awarded ultimately reflects “the incremental value that the patented invention adds to the end product.” *Id.* at 1226. The EMVR thus provides no limitation to the “various ways” in which a court can ensure that this “essential requirement” of apportionment is satisfied. *Id.* To the contrary, as noted, the EMVR is a judge-made “evidentiary” rule that springs from the observation “that reliance on the entire market value [of multi-component products] might mislead the jury, who may be less equipped to understand the extent to which the royalty rate would need to do the work in such instances.” *Id.* at 1226-27. Thus, recognizing that the introduction of large market-value figures might “skew unfairly the jury’s ability to apportion the damages,” courts “must insist on a more realistic starting point for the royalty calculations by juries—often, the smallest saleable unit and, at times, even less.” *Id.* at 1227; *see also LaserDynamics*, 694 F.3d at 67-68.

In short, the EMVR and its associated “smallest saleable unit” are relevant and applicable to “royalty calculations by *juries*.” *Ericsson*, 773 F.3d at 1227 (emphasis added). These principles are neither relevant nor applicable to royalty calculations by experienced *jurists*, who are fully “equipped to understand the extent to which the royalty rate would need to do the work” in cases involving multi-component products. *Id.* And this case, unlike those in which the evidentiary EMVR has been applied to protect less equipped jurors, “was tried on the merits

without a jury.” A2; *see Gaylord v. United States*, 777 F.3d 1363, 1372 (Fed. Cir. 2015) (distinguishing EMVR-related cases from those “not tried to a jury”). The Court should make clear that the cases developing the EMVR and its associated “smallest saleable unit” play no role here: the only relevant question is whether sufficient evidence supports the district court’s conclusion that its award reflects the incremental value that the invention adds to the accused end products.

2. The district court did not base damages on the entire market value of the accused end products.

Notwithstanding the heavy emphasis placed on the EMVR by Cisco and its amici, it is a simple fact that the district court *did not base damages on the entire market value of the accused end products*. A1-32. After rejecting the attenuated damages theories offered by both Cisco and CSIRO—and, interestingly, *neither* CSIRO’s expert *nor* Cisco’s expert propounded a damages analysis based exclusively on the price or profits of Wi-Fi chips, A18-20—the court found that the best evidence regarding the incremental value that the patented invention added to the accused end products came from actual discussions between Cisco and CSIRO executives. A26. In particular, the court noted that a Cisco executive had raised “the possibility of Cisco paying CSIRO \$0.90 in royalties per Cisco enterprise product” for a license to the patent-in-suit, and that this was “the best evidence available of how Cisco valued the contribution of the ’069 Patent near the relevant time period and ... the best indicator of Cisco’s possible bid price at the

time of the hypothetical negotiations.” A26. And in the same timeframe, CSIRO was seeking between \$1.40 and \$1.90 per product based on sales volume. A26.

Finding this to be the most relevant and reliable evidence provided by both parties regarding the incremental value attributable to the patent-in-suit, the district court determined that “a range of \$0.90 to \$1.90” per Cisco enterprise product would have been “a reasonable starting point for negotiations between the parties in 2002 and 2003.” A26. It then considered the impact of each of the *Georgia-Pacific* factors to these baseline ranges for the hypothetical negotiation. A26-30. The court ultimately concluded that the parties would have agreed to rates ranging from \$0.90 to \$1.90 per Cisco end product, and from \$0.65 to \$1.38 per Linksys end product, with the rates decreasing as sales volume increased. A31.

Cisco and its amici might possibly have complaints regarding the district court’s treatment of the relevant testimony and evidence that reflected how Cisco and CSIRO each valued the incremental contribution of the patented technology to the accused end products—but these are *factual* complaints, subject to a deferential clear-error review on appeal. There is no legitimate argument, however, that the district court based damages on the entire market value of the accused end products. That simply did not happen here. A1-32. The district court awarded a per-product royalty based on evidence that both parties would have agreed to negotiate a per-product royalty within the ranges used by the court. A23-32.

And this Court's cases make clear that—unsurprisingly—when the entire market value of the accused products plays no role in the damages analysis, the EMVR is neither triggered nor contravened. *See Synqor, Inc. v. Artesyn Techs., Inc.*, 709 F.3d 1365, 1383 (Fed. Cir. 2013) (rejecting an EMVR argument where the plaintiff “never sought to justify its damages figure based on the price of the customer end products”); *Versata Software, Inc. v. SAP Am., Inc.*, 717 F.3d 1255, 1268 (Fed. Cir. 2013) (rejecting an EMVR argument where “the expert did not apply his 40 percent royalty rate to the entire value of [the] infringing products”). As in *Synqor* and *Versata*, the damages figure at issue here was not “justif[ied] ... based on the price of the customer end products,” *Synqor*, 709 F.3d at 1383, nor was any royalty rate applied “to the entire value of [the] infringing products,” *Versata*, 717 F.3d at 1268. Indeed, the district court did not reach its damages figure by multiplying a percentage rate times a base reflecting the price of end products: it reached its damages figure by applying a per-product rate that varies only with sales *volume*, not with sales *price*. A26-31. And the court used this per-end-product, by-sales-volume approach because the evidence reflected that the parties themselves would have used such an approach. A26.

In short, the district court simply used real-world evidence—the only reliable evidence submitted by the parties—that tended to show, from the perspective of Cisco and CSIRO, the incremental value that the patented invention

adds to the end products. A23-26. This was entirely compatible with the “essential requirement” of the rules of apportionment. *Ericsson*, 773 F.3d at 1226, 1228.

IV. CONCLUSION

The FRAND regime, which has led to the successful adoption and implementation of the 802.11 and similar standards, is working. This Court should thus take care to avoid upsetting the balance between innovators and implementers that the regime navigates—one that rests on the assumption that implementers will pay, and innovators will receive, a fair, reasonable, and non-discriminatory royalty that reflects the incremental value that a standard-essential patent adds to a standard-compliant end product. *Ericsson*, 773 F.3d at 1226-27. Toward that end, Ericsson urges the Court to reject the chip-based approach proposed by Cisco and its amici. That proposal would radically expand the reach of the EMVR and artificially limit royalties to some percentage of the price or profit of Wi-Fi chips, regardless of the incremental value that the patented invention adds to the accused end products. Such an approach is not only deeply inconsistent with the law of apportionment, it threatens to undermine the incentives necessary to ensure that innovating companies such as Ericsson (and other amici) continue to contribute their best technology to the standard-setting process. *Id.* at 1226, 1229.

For all of these reasons, Ericsson respectfully requests that, in deciding this appeal, the Court: (1) make clear that there is no bright-line rule—and should be no

rule—limiting damages on multi-component products to some percentage of the price of incorporated chips; (2) reaffirm that the so-called “entire market value rule,” with its associated “smallest saleable unit,” is an evidentiary principle that is applicable to jury trials, not bench trials; and (3) confirm that the district court did violate any rule of apportionment in this case.

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Respectfully submitted,

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CERTIFICATE OF SERVICE

I hereby certify that the foregoing BRIEF OF *AMICUS CURIAE* ERICSSON INC. IN SUPPORT OF PLAINTIFF-APPELLEE: was served by operation of the Court's CM/ECF system per Fed. R. App. P. 25.

Date: April 13, 2015

/s/ Joel L. Thollander
Joel L. Thollander

CERTIFICATE OF COMPLIANCE

I certify that the foregoing BRIEF OF *AMICUS CURIAE* ERICSSON INC.
IN SUPPORT OF PLAINTIFF-APPELLEE:

1. complies with the type-volume limitation of FED. R. APP. P. 29(d) and 32(a)(7)(B). This brief contains 6,937 words, excluding the parts of the brief exempted by FED. R. APP. P. 32(a)(7)(B)(iii) and FED. CIR. R. 32(b). Microsoft Word 2010 was used to calculate the word count.

2. complies with the typeface requirements of FED. R. APP. P. 32(a)(5) and the type style requirements of FED. R. APP. P. 32(a)(6). This brief has been prepared in a proportionally-spaced typeface using Microsoft Word 2010 in 14-point Times New Roman type style.

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